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ABSTRACT OF THE DISCLOSURE
ACTIVE COMPENSATION FOR OPERATING POINT DRIFT IN AN MRAM
WRITE OPERATION

A method and apparatus for minimizing errors that may occur when writing
5 information to a magnetic memory cell array with an operating write current due to
changes in the local magnetic fields and. A test write current is sent to a reference
memory cell and the effect of the test current on the orientation of the magnetization in
the reference cell is monitored. The write current is then modified to compensate for
any changes in the optimum operating point that have occurred. Arrays of reference
10 magnetic memory cells having varying properties may be used to more accurately
characterize any changes that have occurred in the operating environment. A phase
difference between a time varying current used to drive the reference cell and the
corresponding variations in the orientation of the magnetization in the reference cell
may also be used to further characterize changes in the operating environment.

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